Marked-up Set of Claims (According to 37 CFR 1.121(c))

Claims 1 – 215 (Canceled)

216. (Original) An engine comprising a fuel mixture of oxygen and hydrogen, wherein

combustion temperature is at least partially controlled with the addition of water to combustion.

217. (Original) The engine of claim 216, wherein mechanical rotating energy is created.

218. (Amended) The engine of claim 21[[6]]7, wherein said rotating mechanical energy~~combustion~~ turns a generator to create electrical energy~~turbine~~.

219. (Amended) The engine of claim 216, wherein the steam produced by combustion turns a generator to create electrical energy~~turbine~~.

220. (Original) The engine of claim 216, wherein heat is created.

221. (Canceled)

222. (Amended) The engine of claim ~~216, 217,~~ 218~~, 219~~ or 2[[20]]19, wherein ~~electrical energy is created and~~ at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and/~~or~~ oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

223. (Original) The engine of claim 216, wherein nitrogen or argon is in said fuel mixture.

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224. (Amended) The engine of claim 216, wherein said fuel mixture comprises air ~~is at least partially used instead of oxygen~~.

225. (Original) The engine of claim 216, wherein at least a portion of the steam produced by combustion is converted to hydrogen by the corrosion of at least one metal.

226. (Original) The engine of claim 225, wherein the conversion of said steam into said hydrogen is increased by an electrical current in said metal(s).

227. (Amended) The engine of claim 225 or 226, wherein said hydrogen is at least ~~partially used as~~ a portion of the hydrogen in said fuel mixture~~in said engine~~.

228. (Amended) The engine of claim 216, wherein a generator turns due to the movement of air or water, and wherein

said generator creates electrical energy, and wherein

said electrical energy is at least partially utilized in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and~~/or~~ said oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

229. (Amended) The engine of claim 216, wherein a photovoltaic cell creates electrical energy, and wherein

said electrical energy is at least partially used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and~~/or~~ said oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

230. (Original) The engine of claim 216, incorporating a cryogenic air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said cryogenic air separation unit.

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231. (Amended) The engine of claim 230, wherein the nitrogen separated from air in said cryogenic air separation unit is used to cool any portion of at least one selected from a list consisting of: said cryogenic air separation unit, the storage of oxygen, the storage of hydrogen, electrolysis, coolant for said engine, said engine and any combination thereof.

232. (Original) The engine of claim 230, wherein the nitrogen separated from air in said cryogenic air separation unit is at least partially used to cool air or water.

233. (Original) The engine of claim 216, incorporating a membrane air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said membrane air separation unit.

234. (Original) The engine of claim 216, incorporating a PSA air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said PSA air separation unit.

235. (Original) The engine of claim 230, 233 or 234, wherein the oxygen separated from air is at least one of enriched oxygen, pure oxygen and very pure oxygen.

236. (Amended) The engine of claim 230, 233 or 234, wherein at least a portion the oxygen separated from air is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

237. (Amended) The engine of claim 216, wherein at least one selected from a list consisting of a: corrosion inhibitor, chelant, dispersant and any combination therein is added to the water in said engine.

238. (Original) The engine of claim 216, wherein said engine performs at least one of: internal, turbine and heating combustion.

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239. (Amended) The engine of claim 216, wherein at least one of oxygen and hydrogen is stored in at least one of a cooled gas state and/~~or~~ a liquid state by liquefaction.

240. (Amended) The engine of claim 239, wherein the compressor(s) for at least one of cooling and/~~or~~ liquefaction is powered by at least one of[[:]] said engine and a fuel cell.

241. (Amended) The engine of claim 240, wherein said fuel cell is powered by hydrogen and at least one of[[:]] oxygen and air.

242. (Amended) The engine of claim 216, wherein at least one of said hydrogen and/~~or~~ oxygen is stored in a mixture with frozen water crystals to form a gel.

243. (Amended) The engine of claim 216, wherein at least one selected form a list consisting of: hydrogen, oxygen and water are preheated prior to combustion with the energy from at least one selected from a list consisting of: ambient temperature, said engine, said engine exhaust, an electrical radiant heat source and/~~or~~ any combination therein.

244. (Amended) The engine of claim 217, wherein said mechanical rotating energy from said engine enters a transmission, wherein

said transmission engage in a manner that is inversely proportional to at least one of the torque and/~~or~~ work output of said engine, and wherein

said transmission output mechanical rotating energy turn a generator to create electrical energy.

245. (Original) The engine of claim 244, wherein said transmission engage a flywheel capable of storing rotational kinetic energy, wherein

said flywheel turns said generator.

246. (Original) The engine of claim 244, wherein at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen.

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247. (Amended) The engine of claim 246, wherein at least one of said hydrogen and~~/or~~ oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

248. (Amended) The engine of claim 216 or 219, wherein a pressure control device is in said engine exhaust.

249. (Amended) The engine of claim 216, wherein at least one of combustion heat energy and engine exhaust energy is used to heat at least one of[[:]] a gas and a liquid.

250. (Amended) The engine of claim 249, wherein at least one of[[:]] the gas is air and the liquid is water.

251. (Original) The engine of claim 250, wherein said exhaust discharge directly into said air or water.

252. (Original) The engine of claim 216 or 230, wherein said engine is insulated.

253. (Original) The engine of claim 230, wherein hydrogen is separated.

254. (Original) The engine of claim 216, wherein said oxygen is at least one of: enriched oxygen, pure oxygen and very pure oxygen.

255. (Canceled)

256. (Amended) The engine of claim 216, wherein the temperature of combustion is at least partially controlled with air to combustion in excess over that required to perform combustion, wherein said excess air[[:]] reduces at least one of the combustion temperature and~~/or reduces~~ the formation of nitrogen oxide(s)~~ from available nitrogen in air~~.

257. (Original) The engine of claim 256, wherein there is no water addition to combustion.

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258. (Original) The engine of claim 216, wherein the temperature of said engine exhaust is at least partially cooled with water.

259. (Original) The engine of claim 256, 257 or 258, comprising jet propulsion.

260. (Amended) The engine of claim 216, ~~254, 255~~, 266, 257 or 258, comprising rocket propulsion.

261. (Original) A method of performing combustion comprising a fuel mixture of oxygen and hydrogen, wherein

said oxygen is at least one of: enriched oxygen, pure oxygen and very pure oxygen.

262. (Original) The method of claim 261, wherein water is added to combustion.

263. (Original) The method of claim 261, wherein mechanical rotating energy is created.

264. (Amended) The method of claim 26[[1]]3, wherein said rotating mechanical energy ~~combustion~~ turns a generator to create electrical energy~~turbine~~.

265. (Amended) The method of claim 261, wherein the steam produced by combustion turns a generator to create electrical energy~~turbine~~.

266. (Original) The method of claim 261, wherein heat is created.

267. (Canceled)

268. (Amended) The method of claim ~~261, 262, 263,~~ 264~~, 265~~ or 26[[6]]5, wherein ~~electrical energy is created and~~ at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen, and wherein

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at least a portion of at least one of said hydrogen and~~/or~~ oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said engine~~.

269. (Original) The method of claim 261, wherein nitrogen or argon is in said fuel mixture.

270. (Amended) The method of claim 261, wherein said fuel mixture comprises air ~~is at least partially used instead of oxygen~~.

271. (Original) The method of claim 261, wherein at least a portion of the steam produced by combustion is converted to hydrogen by the corrosion of at least one metal.

272. (Original) The method of claim 271, wherein said conversion of steam into said hydrogen is increased by an electrical current in said metal(s).

273. (Amended) The method of claim 271 or 272, wherein said hydrogen is at least ~~partially used as~~ a portion of the hydrogen in said fuel mixture~~in said combustion~~.

274. (Amended) The method of claim 261, wherein a generator turns due to the movement of air or water, and wherein

said generator creates electrical energy, and wherein

said electrical energy is at least partially utilized in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen and~~/or~~ oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said combustion~~.

275. (Amended) The method of claim 261, wherein a photovoltaic cell creates electrical energy, and wherein

said electrical energy is at least partially used in the electrolysis of water to hydrogen and oxygen, and wherein .

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at least a portion of at least one of said hydrogen and~~/or~~ oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said combustion~~.

276. (Original) The method of claim 261, incorporating a cryogenic air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said cryogenic air separation unit.

277. (Amended) The method of claim 276, wherein the nitrogen separated from air in said cryogenic air separation unit is used to cool any portion of at least one selected from a list consisting of: said cryogenic air separation unit, the storage of oxygen, the storage of hydrogen, electrolysis, coolant for said combustion, said combustion and any combination thereof.

278. (Original) The method of claim 276, wherein the nitrogen separated from air in said cryogenic air separation unit is at least partially used to cool air or water.

279. (Original) The method of claim 261, incorporating a membrane air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said membrane air separation unit.

280. (Original) The method of claim 261, incorporating a PSA air separation unit, wherein

at least a portion of the energy of combustion powers at least a portion of said PSA air separation unit.

281. (Original) The method of claim 276, 279 or 280, wherein the oxygen separated from air is at least one of enriched oxygen, pure oxygen and very pure oxygen.

282. (Amended) The method of claim 276, 279 or 280, wherein at least a portion of the oxygen separated from air is ~~used as~~ at least a portion of said fuel mixture~~in said combustion~~.

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283. (Amended) The method of claim 261, wherein at least one selected from a list consisting of a: corrosion inhibitor, chelant, dispersant and any combination therein is added to the water in said method.

284. (Original) The method of claim 261, wherein the said method performs at least one of: internal, turbine and heating combustion.

285. (Amended) The method of claim 261, wherein at least one of said oxygen and said hydrogen is stored in at least one of a cooled gas state and/~~or~~ a liquid state by liquefaction.

286. (Amended) The method of claim 285, wherein the compressor(s) for at least one of cooling and/~~or~~ liquefaction is powered by at least one selected from a list consisting of[[: a]]said combustion and a fuel cell.

287. (Amended) The method of claim 286, wherein said fuel cell is powered by hydrogen and at least one of[[:]] oxygen and air.

288. (Amended) The method of claim 261, wherein at least one of said hydrogen and/~~or~~ said oxygen is stored in a mixture with frozen water crystals to form a gel.

289. (Amended) The method of claim 261, wherein at least one of: said hydrogen, said oxygen and water [[are]]is preheated prior to combustion with the energy from at least one selected from a list consisting of: ambient temperature, said combustion, said combustion exhaust, an electrical radiant heat source and/~~or~~ any combination therein.

290. (Amended) The method of claim 262, wherein said mechanical rotating energy from said combustion enters a transmission, wherein

said transmission engage in a manner that is inversely proportional to at least one of the torque and/~~or~~ work output of said combustion, and wherein

said transmission output mechanical rotating energy turn a generator to create electrical energy.

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291. (Original) The method of claim 290, wherein said transmission engage a flywheel capable of storing rotational kinetic energy, wherein

said flywheel turns said generator.

292. (Original) The method of claim 290, wherein at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen.

293. (Amended) The method of claim 292, wherein at least a portion of at least one of said hydrogen and~~/or~~ said oxygen is ~~used as~~ at least a portion of said fuel mixture~~in said combustion~~.

294. (Original) The method of claim 261, wherein a pressure control device is in said combustion exhaust.

295. (Amended) The method of claim 261, wherein at least one of combustion heat energy and the exhaust energy of said combustion is used to heat at least one of[[:]] a gas and a liquid.

296. (Amended) The method of claim 295, wherein at least one of[[:]] the gas is air and the liquid is water.

297. (Original) The method of claim 296, wherein said exhaust discharge directly into said air or water.

298. (Original) The method of claim 261 or 276, incorporating insulation of the method.

299. (Original) The method of claim 276, wherein hydrogen is separated.

300. (Amended) The method of claim 261, wherein the temperature of combustion is at least partially controlled with air to combustion in excess over that required to perform

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combustion, wherein said excess air[[:]] reduces at least one of the combustion temperature and~~/or reduces~~ the formation of nitrogen oxide(s)~~ from available nitrogen in air~~.

301. (Original) The method of claim 261, wherein the temperature of combustion exhaust is at least partially cooled with water.

302. (Amended) The method of claim ~~299~~,261, 300 or 301, comprising jet propulsion.

303. (Original) The method of claim 261, 300 or 301, comprising rocket propulsion.

304. (Original) An apparatus performing combustion of oxygen and hydrogen; said apparatus comprising,

a. a fuel apparatus comprising:

i. a source of oxygen, an oxygen flow control valve and an oxygen flow sensing device sensing oxygen flow sending an oxygen flow signal proportional to oxygen flow to a controller,

ii. a source of hydrogen, a hydrogen flow control valve and a hydrogen flow sensing device sensing hydrogen flow sending a hydrogen flow signal proportional to hydrogen flow to a controller,

iii. a source of air, an air flow control device and an air flow sensing device sensing air flow sending an air flow signal proportional to air flow to a controller, and

iv. a temperature measurement device measuring at least one of combustion temperature or said apparatus temperature sending a temperature signal in proportion to said combustion temperature or said apparatus temperature to a controller.

b. a coolant apparatus comprising,

i. a source of coolant and a coolant flow control valve, and

ii. a source of combustion water flow to the combustion chamber, a combustion water flow control valve and a combustion water flow

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sensing device sensing combustion water flow sending a combustion water flow signal proportional to combustion water flow to a controller.

c. a control apparatus comprising at least one controller;

i. receiving said proportional flow signal for oxygen, hydrogen, air and combustion water,

ii. receiving said proportional temperature signal,

iii. receiving an external combustion signal set point,

iv. having a setpoint for the ratio of hydrogen to oxygen,

v. having a setpoint for the ratio of hydrogen to combustion water,

vi. having a warm temperature setpoint,

vii. having a coolant temperature setpoint, and

viii. having a hot temperature setpoint.

d. said control apparatus comparing said combustion signal setpoint to said hydrogen flow signal, sending a signal to the hydrogen flow control valve in proportion to the difference in said hydrogen flow signal to said combustion signal setpoint, thereby proportioning said hydrogen flow control valve.

e. said control apparatus comparing said hydrogen flow signal and said oxygen flow signal to the hydrogen to oxygen ratio setpoint, sending a signal to the oxygen flow control valve, thereby proportioning the oxygen flow control valve;

i. in the case wherein said oxygen flow control valve signal is below and not about 100%, sending a signal to said air flow control device closing said air flow control device.

ii. in the case wherein said oxygen flow control valve signal is greater than or about 100%, comparing said oxygen flow signal and said air flow signal to said hydrogen to oxygen ratio setpoint obtaining an air flow difference, sending a proportional signal to said air flow control device that is in proportion to said difference, thereby proportioning said air flow control device.

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f. said control apparatus comparing said temperature signal to said warm temperature setpoint, said coolant temperature setpoint and said hot temperature setpoint:

i. in the case wherein said temperature signal is less than said warm temperature setpoint, less than said coolant temperature setpoint and less than said hot temperature setpoint, sending a signal to said combustion water flow control valve to close said combustion water flow control valve; and sending a signal to said coolant flow control valve to close said coolant flow control valve.

ii. in the case wherein said temperature signal is equal to or greater than said warm temperature setpoint, less than said coolant temperature setpoint and less than said hot temperature setpoint, obtain a difference between said temperature signal and said warm temperature setpoint, sending a signal in proportion to the difference between said temperature signal and said warm temperature setpoint, which obtains a hydrogen to combustion water ratio that is greater than said hydrogen to combustion water ratio setpoint, thereby sending a signal to said combustion water flow valve proportioning said combustion water flow control valve; and send a signal to said coolant flow control valve, thereby closing said coolant flow control valve.

iii. in the case wherein said temperature signal is greater than said warm temperature setpoint, equal to or greater than said coolant temperature setpoint and less than said hot temperature setpoint, obtain a difference between said temperature signal and said coolant temperature setpoint, thereby sending a signal to said combustion water flow control valve that obtains combustion water flow that is equal to the hydrogen to combustion water ratio setpoint; and sending a signal in proportion to the difference between said temperature signal and said coolant temperature setpoint to said coolant flow control valve, thereby proportioning said coolant flow control valve.

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iv. in the case wherein said temperature signal is greater than said warm temperature setpoint, greater than said coolant temperature setpoint and equal to or greater than said hot temperature setpoint, sending a signal in proportion to the difference between said temperature signal and said coolant temperature setpoint to said coolant flow control valve thereby proportioning said coolant flow control valve; sending a signal to said combustion water flow control valve closing said combustion water flow control valve; sending a signal to said hydrogen flow control valve, thereby closing said hydrogen flow control valve; sending a signal to said oxygen flow control valve, thereby closing said oxygen flow control valve; and sending a signal to said air flow control valve, thereby closing said air flow control valve.

305. (Original) The apparatus of claim 304, wherein mechanical rotating energy is created.

306. (Amended) The apparatus of claim 30[[4]]5, wherein said ~~apparatus includes a turbine, and wherein said combustion turns said turbine~~rotating mechanical energy turns a generator to create electrical energy~~turbine~~.

307. (Amended) The apparatus of claim 304, wherein ~~said apparatus includes a turbine, and wherein~~ the steam from said combustion turns a generator to create electrical energy~~turbine~~.

308. (Original) The apparatus of claim 304, wherein heat is created.

309. (Canceled)

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310. (Amended) The apparatus of claim ~~304, 305,~~ 306~~, 307~~ or 30[[8]]7, wherein electrical energy is created and at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen is at least a portion of said hydrogen source and~~/or~~ said oxygen is ~~used as~~ at least a portion of said oxygen source~~in said combustion.~~

311. (Original) The apparatus of claim 304, wherein nitrogen or argon is in the oxygen source.

312. (Original) The apparatus of claim 304, wherein at least a portion of the steam produced by combustion is converted to hydrogen by the corrosion of at least one metal.

313. (Original) The apparatus of claim 312, wherein said conversion of steam to said hydrogen is increased by an electrical current in said metal(s).

314. (Amended) The apparatus of claim 312 or 313, wherein at least a portion of said hydrogen is at least a portion of said hydrogen source~~used in said combustion~~.

315. (Amended) The apparatus of claim 304, wherein a generator turns due to the movement of air or water, and wherein

said generator creates electrical energy, and wherein

said electrical energy is at least partially utilized in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen is at least a portion of said hydrogen source and~~/or~~ said oxygen is at least a portion of said oxygen source~~used in said combustion.~~

316. (Amended) The apparatus of claim 304, wherein a photovoltaic cell creates electrical energy, and wherein

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said electrical energy is at least partially used in the electrolysis of water to hydrogen and oxygen, and wherein

at least a portion of at least one of said hydrogen is at least a portion of said hydrogen source and/~~or~~ said oxygen is at least a portion of said oxygen source~~used as fuel in said combustion~~.

317. (Original) The apparatus of claim 304, wherein said apparatus includes a cryogenic air separation unit, and wherein

said combustion powers at least a portion of said cryogenic air separation unit.

318. (Amended) The apparatus of claim 317, wherein the nitrogen separated from air in said cryogenic air separation unit is used to cool any portion of at least one selected from a list consisting of: said cryogenic air separation unit, the storage of oxygen, the storage of hydrogen, electrolysis, coolant for said apparatus, said apparatus and any combination thereof.

319. (Original) The apparatus of claim 317, wherein the nitrogen separated from air in said cryogenic air separation unit is at least partially used to cool air or water.

320. (Original) The apparatus of claim 304, wherein said apparatus includes a membrane air separation unit, and wherein

said combustion powers at least a portion of said membrane air separation unit.

321. (Original) The apparatus of claim 304, wherein said apparatus includes a PSA air separation unit, and wherein

said combustion powers at least a portion of said PSA air separation unit.

322. (Original) The apparatus of claim 317, 320 or 321, wherein the oxygen separated from air is at least one of enriched oxygen, pure oxygen and very pure oxygen.

323. (Amended) The apparatus of claim 317, 320 or 321, wherein at least a portion of the oxygen separated from air is at least a portion of said oxygen source~~used in said combustion~~.

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324. (Amended) The apparatus of claim 304, wherein at least one selected from a list consisting of a: corrosion inhibitor, chelant, dispersant and any combination therein is added to the water in said apparatus.

325. (Amended) The apparatus of claim 304, wherein at least one of[[:]] oxygen and hydrogen is stored in a cooled state or in a liquid state by liquefaction.

326. (Amended) The apparatus of claim 325, wherein compressor(s) for at least one of cooling and/~~or~~ liquefaction is powered by at least one of[[:]] said combustion and a fuel cell.

327. (Amended) The apparatus of claim 326, wherein said fuel cell is powered by hydrogen and at least one of[[:]] oxygen and air.

328. (Amended) The apparatus of claim 304, wherein at least one of said hydrogen and/~~or~~ oxygen is stored in a mixture with frozen water crystals to form a gel.

329. (Amended) The apparatus of claim 304, wherein at least one of said: hydrogen, oxygen and water [[are]]is preheated prior to said combustion with the energy from at least one selected from a list consisting of: ambient temperature, said combustion, said combustion exhaust, an electrical radiant heat source and/~~or~~ any combination therein.

330. (Amended) The apparatus of claim 305, wherein said mechanical rotating energy from said combustion enters a transmission, wherein

said transmission engage in a manner that is inversely proportional to at least one of the torque and/~~or~~ work output of said combustion, and wherein

said transmission output mechanical rotating energy turn a generator to create electrical energy.

331. (Original) The apparatus of claim 330, wherein said transmission engage a flywheel capable of storing rotational kinetic energy, wherein

said flywheel turns said generator.

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332. (Original) The apparatus of claim 330, wherein at least a portion of said electrical energy is used in the electrolysis of water to hydrogen and oxygen.

333. (Amended) The apparatus of claim 332, wherein at least a portion of at least one of said hydrogen is at least a portion of said hydrogen source and/~~or~~ said oxygen is at least a portion of said oxygen source~~used in said combustion~~.

334. (Amended) The apparatus of claim 304 or 307, wherein a pressure control device is in said combustion exhaust.

335. (Amended) The apparatus of claim 304, wherein ~~at least one of~~ at least one of combustion heat energy and combustion exhaust energy is used to heat at least one of[[:]] a gas and a liquid.

336. (Amended) The apparatus of claim 335, wherein at least one of[[:]] the gas is air and the liquid is water.

337. (Original) The apparatus of claim 336, wherein said exhaust energy discharge directly into said air or water.

338. (Amended) The apparatus of claim 304, wherein there is not at least one of[[:]] said source of coolant and said coolant flow control valve.

339. (Amended) The apparatus of claim 304, wherein there is not at least one of: said source of oxygen, said oxygen flow measurement device and said oxygen flow control valve.

340. (Amended) The apparatus of claim 304, wherein there is not at least one of: [[a]]said source of combustion water, said combustion water flow measurement device and said combustion water flow control valve.

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341. (Original) The apparatus of claim 304 or 317, wherein said apparatus is insulated.

342. (Original) The apparatus of claim 317, wherein hydrogen is separated.

343. (Original) The apparatus of claim 304, wherein said oxygen is at least one of: enriched oxygen, pure oxygen and very pure oxygen.

344. (Original) The system of claim 343, wherein there is no water addition to combustion.

345. (Amended) The system of claim 304, wherein the temperature of said combustion is at least partially controlled with air to said combustion in excess over that required to perform said combustion, wherein said excess air performs at least one of reduce[[es]]ing: said combustion temperature ~~and/or reduces~~ the formation of nitrogen oxide(s) ~~from available nitrogen in air~~.

346. (Original) The apparatus of claim 304, wherein the temperature of said combustion exhaust is at least partially cooled with water.

347. (Original) The apparatus of claim 345, wherein there is no combustion water.

348. (Original) The apparatus of claim 345, 346 or 347, comprising jet propulsion.

349. (Original) The apparatus of claim 304, 343, 344, 345, 346 and 347, comprising rocket propulsion.

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